

SHORT TERM ANALYSIS OF FUNCTIONAL RESULTS OF ACETABULAR FRACTURES TREATED BY INTERNAL FIXATION WITH RECON PLATE USING KOCHER-LANGENBECK APPROACH.

Abstract:

Introduction:

About 10 % of pelvic injuries involves acetabulum of which more than 80 % occurred in road traffic accidents and 10.7% in fall victim injuries. Acetabulum being important weight-bearing surface of hip joint, fixation of these fractures becomes extremely important to give congruous stable painless hip joint. This study mainly conducted to analyse the short term functional outcome after stable rigid internal fixation of posterior column and posterior wall in acetabular fractures through Kocher-Langenbeck approach.

Materials and Methods:

This is a prospective study conducted in the Department of Orthopaedic surgery, Government Royapettah hospital. Patients with age more than 18 years and less than 65 years, fractures displaced more than 2 mm including Posterior wall , Posterior column, Transverse, Posterior column with posterior wall, Transverse with posterior wall, T type fractures (Judet classification),fracture less than 3 weeks with or without posterior hip dislocation were included. Open fractures, local soft tissue problems, severe medical contraindications for surgery, fractures more than 3weeks old, fractures with pre-existing hip joint arthritis, patients with other disorders such as Ankylosing spondylitis, Rheumatoid arthritis , pathological

fracture and fractures of types Anterior wall, Anterior column, Anterior column with posterior hemitransverse, Both column fractures (Judet classification). All patients operated through Kocher-Langenbeck approach in prone position. Postoperatively quality of fracture reduction analysed using Matta's criteria and at 6th month functional outcome analysed using Modified Merle de Aubigne Postel Scoring system .

Observation and Results:

Male patients dominated in our study with ratio of 6.3:1. Posterior column with posterior wall fracture is most common fracture type in our study [5 patients (25%)] followed by Posterior wall fracture [4 patients(20%)]. Out of 19 patients, four patients(20%) had excellent , eight patient(40%) had good , four patient(20%) had fair and three patient(15%) had poor results. Average Functional outcome score was 14.73 for ranging from 11 to 18 (Maximum Score- 18). No patient had heterotopic ossification or post-traumatic osteonecrosis.

Conclusion:

Kocher-Langenbeck approach can be used address almost all the fractures except fractures involving Anterior wall ,Anterior column and Bicolumn fracture. Providing prophylaxis against DVT and heterotopic ossification reduces the complications of surgical treatment. The learning curve being relatively slow,

proper understanding the fracture pattern and good preop planning will help to minimize the duration of surgery and complications.

Keywords:

Acetabulum, Matta's criteria, Modified Merle de Aubigne Postel score, Heterotopic ossification, Kocher-Langenbeck approach.